

Notice of Allowability

Application No.

10/729,802

Applicant(s)

JULIEN ET AL.

Examiner

Hope A. Robinson

Art Unit

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/19/07.
2. ☒ The allowed claim(s) is/are 1-12 and 21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 12/19/07.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization of this Examiner's amendment was given in a telephone interview with Mr. Ted Apple on December 19, 2007.

3. The claims have been amended as follows:

1. (Currently amended) An isolated recombinant polynucleotide ~~that comprises~~ comprising a nucleotide sequence ~~encoding that encodes~~ a disorazole polyketide synthase (PKS) protein, wherein said polynucleotide encodes a polypeptide having at least 98% sequence identity to the amino acid sequence of a domain of the disorazole polyketide synthase encoded by SEQ ID NO:1, wherein said domain is required for the biosynthesis of disorazole.

3. (Currently Amended) An isolated recombinant polynucleotide comprising a nucleotide sequence that ~~The polynucleotide of claim 1, wherein said polynucleotide encodes a~~ PKS domain polypeptide having at least 98% sequence identity to the amino acid sequence of a domain encoded in ~~SEQ ID NO:1~~ bases 8157-26117 (DszA); 26209-44787(DszB); 44976-56431 (DszC); or 57756-60278(DszD) of SEQ ID NO:1, wherein said domain is required for the biosynthesis of disorazole.

4. (Currently Amended) The polynucleotide of claim 3, ~~wherein said polypeptide~~ has comprising a nucleotide sequence that encodes a PKS domain having 100% sequence identity to said the amino acid sequence of a domain encoded in bases 8157-26117 (DszA); 26209-44787(DszB); 44976-56431 (DszC); or 57756-60278 (DszD) of SEQ ID NO:1.

5. (Currently amended) The polynucleotide of claim 1, wherein said polynucleotide encodes a polypeptide having at least 98% sequence identity to the amino acid sequence of a module of the disorazole polyketide synthase encoded by SEQ ID NO:1 bases 8166-13823 (module 1), 14067-19376 (module 2), 19491-23120 (module 3), 23331-26117 (module 4a), 26209-28056 (module 4b), 28234-29565 (module 5), 32971-37683 (module 6), 37834-42405 (module 7), or 42706-44787(module 8), wherein said module is required for the biosynthesis of disorazole.

8. (Currently amended) ~~A~~ An isolated recombinant host cell comprising the vector of claim 7.

9. (Currently amended) ~~A~~ An isolated recombinant host cell comprising a polynucleotide of claim 1 integrated into the cell chromosomal DNA.

12. (Currently amended) ~~A~~ An isolated recombinant host cell comprising the chimeric PKS polynucleotide of claim 11.

EXAMINER'S COMMENTS

Withdrawn-Claim Rejection 112

4. Previous rejections to the claims under 35 U.S.C. 112, first and second paragraphs are withdrawn by virtue of the amendments made herein.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hope A. Robinson whose telephone number is 571-272-0957. The examiner can normally be reached on Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy, can be reached at (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Primary Examiner

HOPE ROBINSON
PRIMARY EXAMINER